

### **Abstract of the Disclosure**

A system (11) for providing purified water comprises a plurality of individual modules, each of which includes a separable head (13) and a canister (17), which modules are joined one to another via these heads to create a composite manifold (15).

- 5 The heads and canisters are respectively of substantially identical construction, and the hollow canisters include the following units: preheater, prefilter (25), pump (27), membrane purification (29), postfilter (31), and UV treatment. The overall system is monitored by a control unit (131) that is regularly interrogated by an off-site, headquarters computer, and both the control unit (131) and the headquarters computer
- 10 are proactive in detecting potential difficulties that may be able to be readily remedied by promptly dispatching a serviceperson with a replacement for the canister containing the operating unit that requires replacement. The system itself is designed for extended term operation using a spirally wound, RO membrane purification element (29) by automatically and repeatedly flushing the feed passageways in the RO element whenever
- 15 the storage tank (123) is full of purified water, using a purified water feed from an auxiliary purification unit (85) for such flushing.